

Amendment and Response

Page 3 of 12

Serial No.: 09/727,739

Confirmation No.: 4181

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For: SOMATOSTATINS AND METHODS

a nucleotide sequence that encodes a novel somatostatin polypeptide according to the invention, or (b) the complement of such nucleotide sequence. "Substantially complementary" polynucleotide fragments can include at least one base pair mismatch, such that at least one nucleotide present on a second polynucleotide fragment, however the two polynucleotide fragments will still have the capacity to hybridize. For instance, the middle nucleotide of each of the two DNA fragments 5'-AGCAAATAT and 5'-ATATATGCT will not base pair, but these two polynucleotide fragments are nonetheless substantially complementary as defined herein. Two polynucleotide fragments are substantially complementary if they hybridize under hybridization conditions exemplified by 2X SSC (SSC: 150mM NaCl, 15 mM trisodium citrate, pH 7.6) at 55°C. Substantially complementary polynucleotide fragments for purposes of the present invention preferably share at least one region of at least 20 nucleotides in length which shared region has at least 60% nucleotide identity, preferably at least 80% nucleotide identity, more preferably at least 90% nucleotide identity and most preferably at least 95% nucleotide identity. Particularly preferred substantially complementary polynucleotide fragments share a plurality of such regions. Locations and levels of nucleotide sequence identity between two nucleotide sequences can be readily determined using CLUSTALW multiple sequence alignment software (J. Thompson et al., Nucleic Acids Res., 22:4673-4680 (1994)) available on the world wide web at www.ebi.ac.uk/clustalw/.

In the Claims

Please amend claims 1-5 and 12, 14, and 15 as indicated herein. The amended claims are provided below in clean form. Pursuant to 37 C.F.R. §1.121, amended claims are also shown in Appendix A with notations to indicate changes made (for convenience, all pending claims, are provided in Appendix A).

1. (Amended) An isolated or purified somatostatin polypeptide comprising a polypeptide selected from the group consisting of:
 - (a) a polypeptide comprising SEQ ID NO:15;

Amendment and Response

Page 4 of 12

Serial No.: 09/727,739

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(b) a subunit of the polypeptide of (a) comprising SEQ ID NO:16 and at least 7 contiguous amino acids from SEQ ID NO:17;

(c) an analog of the polypeptide of (a) that has an amino acid sequence at least about 85% identical to SEQ ID NO:15; and

(d) an analog of the subunit of (b) having an amino acid sequence at least about 90% identical to the amino acid sequence of the subunit;

wherein the somatostatin polypeptide binds to a somatostatin receptor.

2. (Amended) The somatostatin polypeptide of claim 1, wherein the somatostatin polypeptide comprises at least one amino acid sequence selected from the group consisting of SEQ ID NOs:2, 16, 17, 18, and 19.

2/6 cont

3. (Amended) A polypeptide comprising at least one amino acid sequence selected from the group consisting of SEQ ID NOs:15, 17, 18, and 19.

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4. (Amended) A polynucleotide comprising at least one nucleotide sequence that encodes at least one somatostatin polypeptide of claim 1.

5. (Amended) The polynucleotide of claim 4 comprising SEQ ID NO:20.

12. (Amended) A fusion polypeptide comprising an N-terminal somatostatin region comprising at least one first amino acid sequence comprising a somatostatin polypeptide of claim 1 covalently linked to a C-terminal region comprising a second amino acid sequence.

25

14. (Amended) The fusion polypeptide of claim 12 wherein the first amino acid sequence comprises at least one amino acid sequence selected from the group consisting of NOs: 15, 16, 17, 18, and 19.

1/6

Amendment and Response

Page 5 of 12

Serial No.: 09/727,739

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15. (Amended) The fusion polypeptide of claim 13 wherein the first amino acid sequence comprises SEQ ID NO:18.
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